Known		Compute	
Distance	200 nm	True airspeed (TAS) <*2*>	
True course (TC)	270°	Drift correction (DC) <*3,4,5,6*>	
Variation	15° E	True heading (TH) <*7*>	
Altitude	5,500 feet	Magnetic heading (MH) <*8*>	
Temperature	56° F = 13°C	Ground speed (GS) <*9*>	
Calibrated airspeed (CAS)	140 mph <*1*>	Estimated time enroute (ETE) <*10*>	
Wind	330° at 25 knots (330/25)	Estimated fuel used <*11*>	
Fuel on board	50 gallons	Flight time available <*12*>	
Fuel consumption	11 gallons / hour		

Solution:

1	**Convert all information into common units - either statute or nautical** - Place speed in statute miles per hour (140 mph) opposite STAT arrow. Read nautical miles per hour opposite NAUT arrow.	122 knots
2	**Compute TAS** - Set TEMP (56°) on rotating face opposite ALT (5.5) in window. Find CAS (122 kts) on MINUTES scale. Read TAS on MILES scale.	133 knots
3	**Put wind velocity on computer** - Position wind DIRECTION (330°) on compass rose opposite TRUE INDEX. Draw VELOCITY vector over centerline FROM grommet TOWARD True Index. (Note: Vector length, 25 units = wind velocity, 25 knots)	
4	**Turn compass rose until true course (TC) is under TRUE INDEX** - Position 270° under TRUE INDEX	
5	**Move slide until true airspeed (TAS) is under tail of wind vector** - 135 knots under tail of wind vector	
6	**Read drift correction under tail of wind vector**	9° right
7	**Compute true heading (TH) -** Add right drift to TC or subtract left drift from TC. 270 + 9 = 279.	279°
8	**Compute magnetic heading** - Add west variance to TH or subtract east variance from TH. 279 - 15 = 264	264°
9	**Read groundspeed under grommet**	120 kts
10	**Compute ETE from GS and distance** - Set INDEX on compass rose opposite GS (120). Read ETE on HOURS scale opposite distance on MILES scale	1:40
11	**Compute estimated fuel use** - Set INDEX on compass rose opposite fuel consumption (11 gal/hr). Read fuel use on MILES scale opposite ETE on HOURS scale.	18.2 gals
12	**Compute flight time available** - Set INDEX on compass rose opposite fuel consumption (11 gal/hr). Read flight time on HOURS scale opposite fuel on board on MILES scale	4:33